

Application No. 09/678,783

May 31, 2005

Reply to office action of March 3, 2005

Remarks/Arguments

Applicant gratefully acknowledges the thorough Examination to date and has made an effort to fully respond to all the issues raised by the Examiner. Applicant has taken care and believes that no new matter has been introduced by way of this amendment. Reconsideration of the application in view of the above amendments and following remarks is respectfully requested.

Rejection of Claims 1-10 under 35 USC 102

The Examiner has rejected Claims 1-10 under 35 USC 102 as being anticipated by U.S.P.N. 5,910,803, issued to Grau et al. The Examiner states:

“Regarding **claim 1**, in accordance with Grau reference entirety, Grau discloses a method for determining a routing for packets in a network of network objects, said method (Figs. 7A-7B and col. 8, line 11 to col. 11, line 60) comprising:

a) dividing said network into WAN (Wide Area Network) segments and LAN (Local Area Network) segments (*col. 8, line 11- col. 9, line 43*);

b) determining a routing for packets through each segment (*col. 13, lines 6-13; Route tracing*);

c) combining said routing determined for each segment in step b) to obtain a total routing through the network (*col. 13, lines 14-20*).

Regarding **claim 2**, in addition to features recited in base claim 1 (see rationales discussed above), Grau further discloses wherein step a) includes determining which network objects (*AtlasPage objects*) are routers (*col. 8, lines 62-67*) and which network objects (*AtlasNode objects*) are non-routers (*col. 8, lines 51-61 and col. 9, lines 12-18*).

Regarding **claim 3**, in addition to features recited in base claim 2 (see rationales discussed above, Grau further discloses partitioning non-router network objects into discrete LAN segments, each LAN segment being a collection of connected non-router network objects separated from other non-router network objects by at least one router (*col. 8, lines 51-61 and col. 9, lines 12-18 and col. 11, line 61 to col. 34 and thereafter*).

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Regarding **claim 4**, in addition to features recited in base claim 2 (see rationales discussed above), Grau further discloses partitioning routers into WAN segments, each WAN segment being a collection of connected routers separated from other routers by at least one non-router network object (*col. 8, lines 51-67 and col. 11, line 61 to col. 34 and thereafter*).

Regarding **claim 5**, in addition to features recited in base claim 4 (see rationales discussed above), Grau further discloses wherein step b) includes determining for each WAN segment a sequence of routers a packet passes through from a source router to a destination router in the WAN segment (*col. 13, lines 6-20*).

Regarding **claim 6**, in addition to features recited in base claim 3 (see rationales discussed above), Grau further discloses wherein step b) includes determining for each segment which non-router objects a packet passes through from a source non-router to a destination non-router in the LAN segment (*col. 13, lines 6-20*).

Regarding **claim 7**, in addition to features recited in base claim 1 (see rationales discussed above), Grau further discloses wherein step b) is executed from a plurality of beacons located at different points in the network (*col. 13, lines 16-20, Grau discloses protocol-specific topology tracing feature includes viewing of individual protocol routing in the context of the entire network corresponding to the claimed feature as recited*).

Regarding **claim 8**, in addition to features recited in base claim 6 (see rationales discussed above), Grau further discloses wherein step b) include reading a table of source addresses (*topology database*) at each non-router network object in each LAN segment, said table containing source addresses of packets which transit through said non-router network object (*col. 8, lines 40-43 and thereafter*).

Regarding **claim 9**, in addition to features recited in base claim 3 (see rationales discussed above), Grau further discloses wherein step b) is accomplished using a previously determined topology of the network (*see col. 13, lines 16-20*).

Regarding **claim 10**, in addition to features recited in base claim 5 (see rationales discussed above), Grau further discloses wherein the sequence of routers a packet passes through is determined from a plurality of beacons located at different points in the network (*col. 13, lines 16-20, Grau discloses protocol-specific topology tracing feature includes viewing of individual protocol routing in the context of the entire network corresponding to the claimed feature as recited*)."

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Applicant respectfully submits that the Grau et al. patent is a mapping tool that simply maps network topology and therefore is unrelated to the present invention. A key difference is that the Grau et al. patent utilizes a topology database that has been previously determined. Specifically, the route tracing aspect described in column 13 of the Grau et al. patent is a navigation feature that "highlights" a previously determined route of links rather than a feature as discussed in paragraph b) and c) of Claim 1 for determining and combining routings in the subject application.

The problem solved by the present invention is the determination of topology of a network, which is performed by determining connections between two network objects, namely non-routing and routing objects. According to the present invention, the network of networks objects is divided into LANS and WANS, whereby the network objects are classified based on certain criteria characteristic of LANS and WANS. On page 7 of the subject application there is a discussion of WAN segments versus LAN segments respectively. LAN segments are generally connected non-router objects bound by router objects, whereas WAN segments are generally inter-connected router objects bound by LAN segments. Claim 1 divides the network into LAN and WAN segments so as to enable the determination of the routing of packets in the network. The Grau et al. methodology and system does not actively seek out to resolve ambiguities in the routing paths of packets. Moreover, Examiner's attention is drawn to page 18, lines 29-33, of the original Specification whereby the methodology of the present invention as in Claim 1, specifically steps c) and d), is explained. Clearly, Grau et al. does not disclose step b) of "determining connections between non-routing objects, and between routing objects". Therefore, Grau et al. cannot disclose steps c) and d) as these steps are based on determinations made in step b). Thus, the Grau et al. patent does not anticipate independent Claim 1, and dependent Claims 3 through 10.

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Finally, Applicant has deleted Claim 2 and generally incorporated its subject matter into Claim 1. Applicant believes that the incorporated subject matter more clearly defines the composition of the LAN segments and the WAN segments as including non-routing and routing objects respectively. It is believed that this limitation serves to further distinguish the Claims of the present invention from the Grau et al. patent.

With respect to the dependent Claims 3 through 10, Applicant believes that the subject matter of the dependent claims is allowable as they include limitations of base Claim 1 which is not anticipated by the Grau et al. patent. Thus, the rejection of Claims 3 through 10 is overcome.

Allowable Subject Matter of Claims 11-16, and 17

The Applicant acknowledges with thanks that the Examiner has allowed Claims 11 through 16, and 17 for reasons provided in the Office Action.

Conclusion

Applicant has made an effort to substantially eliminate any unclear details within the claims and believes that no new matter has been entered during this process. The 35 USC 102 rejection has also been overcome by way arguments made in the remarks section above. Applicant respectfully submits that all of the claims presently standing in the application are patentably distinguished from the teachings of all references of record either taken alone or in any combination. Accordingly, reconsideration and allowance of this application is respectfully solicited.

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Should any further fees or payments be necessary for entry of this amendment and further prosecution of this application, the undersigned hereby authorizes the Commissioner to debit and/or credit our Deposit Account No. 16-0600.

Respectfully Submitted,

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